технічної діагностики і проведення ремонтів опорних вузлів МТ на надземних переходах застосовують мобільні підіймальні пристрої, у яких елементами, що створюють підіймальну силу є пневмоподушки фірми «Vetter» [1] та інші. Недоліком таких підіймальних пристроїв є відносно невелика вантажопідіймальність (250…300 кН) і необхідність установки симетрично до осі трубопроводу двох пневмоподушок, що значно обмежує оперативний доступ до поверхонь опорних вузлів МТ.

Виходячи з цього нами запропонована конструкція мобільного підіймального пристрою, яка включає два гідроциліндри з шарнірними опорами, металеву підкладку, тяговий ланцюг і гідронасос. Вантажопідіймальність запропонованого пристрою складає 500 кН. Вага окремих складових такого пристрою не перевищує 27 кг, що дозволяє проводити монтаж і ремонтні роботи опорних вузлів надземних переходів МТ без застосування підіймальних кранів.

Напружено-деформований стан МТ у процесі діагностичних і ремонтних робіт визначаємо за допомогою методу скінченних елементів. У випадку виявлення корозійних і тріщиноподібних дефектів під хомутами опорних вузлів оцінку їх залишкової міцності проводимо на основі критерію статичної міцності, що базується на двокритеріальному підході і оцінює два граничних стани: крихкого і в'язкого руйнування.

Запропонований комплекс технічних засобів і програмне забезпечення були використані під час проведення діагностики і ремонту опорних вузлів магістральних газопроводів (МГ) «Торжок-Долина» Ду 1400 мм, через р. Случ і МГ «Івацевичі-Долина» II нитка Ду 1200 мм, через р. Свіча.

Ключові слова: технічна діагностика, магістральний трубопровід, опорний вузол, корозійні і тріщиноподібні дефекти.

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УДК 373

ACTUALITY OF NEUROLLING PROGRAMMING USING IN FOREIGN LANGUAGE

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Analysis of scientific research shows that there are a number of contradictions between the tasks of professional activity and the nature of the educational and cognitive processes. The teacher should exhibit non-standard, creative thinking,

flexible imagination and the ability to perceive and develop innovations, to use the latest achievements of technology to organize their work.

One of the innovative methods is neurolinguistic programming, which you can use to achieve positive results in learning a foreign language.

Neurolinguistic programming originated in the early 1970s and resulted from the collaboration of J. Grinder, an assistant professor of linguistics at the University of California, Santa Cruz, and R. Bandler [1].

Recently, both national and foreign scholars (J. Grinder, D. Seymour, V. Walker, etc.) have been paying attention to neurolinguistic programming.

Walker noted that neurolinguistic programming is "at the same time a system of theoretical models that help to understand the structure of human experience and activity, as well as a group of practical methods that lead to constructive change and development" [2].

There are scientists who supports a natural approach of learning foreign languages. The general approach applies to children of pre-school age, as well as to pupils at the stage of initial mastery of a foreign language. However, in higher education, this strategy is not appropriate, since the graduate student must be able to not only read, understand and conduct the conversation, but also be able to translate the text in their specialty.

In recent years, the focus has been taken on personality-oriented pedagogy. Nevertheless, it should be noted that in the conditions of classroom practical group lessons this method is not realistic. Therefore, it is considered appropriate to attempt to provide tasks that will cover all channels of presentation and processing of information at the same time. The teacher is obliged to understand the possible differences in the perception of information and the ability to apply and, if necessary, change the tactics of teaching.

The results of the study of neurolinguistic programming have shown that its techniques are used in every human interaction, as well as in the interactive methods that are present in foreign language lessons. Creating a welcoming atmosphere between the teacher and the student is one of the conditions for successful conduct of the class. Good communication is defined in neurolinguistic programming as a "report" that is characterized by such traits as harmony, respect, and trust. Reporting is a human relation, at both the verbal and physiological levels.

In the course of the theoretical study, we identified the key concepts of neurolinguistic programming: representative systems (modalities), rapport, eye scan patterns, speech predicates, visualization. It was also revealed the influence of structural features of the nervous system and the student's brain on his academic performance.

So, we have selected the main techniques of neurolinguistic programming that contribute to the implementation of multisensory training in practice. That is, their use can increase the quality of knowledge and performance of students, as well as optimize the relationship between teacher and students. The following techniques

used in the lessons in the complex are of great practical importance, which has been proved by many teachers and practitioners.

The development of students' visual ability. J.Grinder defines the concept of "visualization" as the ability to see words through the eyes of the brain [3]. To do this, when introducing new material, students should, firstly, listen and record (translation of external audio information into an internal visual form), secondly, read, make notes and reproduce material according to the records (translation of external visual information into an internal visual form), thirdly, listen and reproduce material without recording (translation of external visual information into internal visual).

Using metaphors. J. Grinder claims that the metaphor is "a parallel representation of the content; the idea presented as a whole» The metaphor does not require explanation from the teacher, otherwise the context narrows. Along with metaphors, teachers successfully apply relaxation exercises, which also help to activate mental processes and contribute to the removal of educational stress and relaxation.

Anchoring. An anchor is any irritant that includes a number of internal reactions and actions. Anchors can be visual, auditory, kinesthetic and olfactory. The audio anchors include various readers for memorizing vocabulary and grammatical structures. We have summarized the existing neurolinguistic programming techniques used in training. Firstly, it takes into account the characteristics of each student (modality and the leading hemisphere). Secondly, the possibility of developing visual abilities of lagging students. Thirdly, the implementation of multisensory training in order to present information on all three modalities.

Thus, despite the fact that neurolinguistic programming appeared relatively recently, scientists have developed methods for introducing techniques of this branch of psychology into the educational process. After the theoretical study, we have outlined the prospect of conducting experimental work aimed at studying the characteristics of students and the implementation of training taking into account these features.

Therefore, neurolinguistic programming is increasingly used in various fields of activity related to the ability to influence the mental state of individuals and groups, their consciousness, and the psychology of behavior. As one of the modern technologies, neurolinguistic programming allows to stimulate students' awareness and behavior to certain activities, which can improve the learning of a foreign language.

Keywords: Neurolinguistic programming, report, communication, foreign language, anchoring.

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